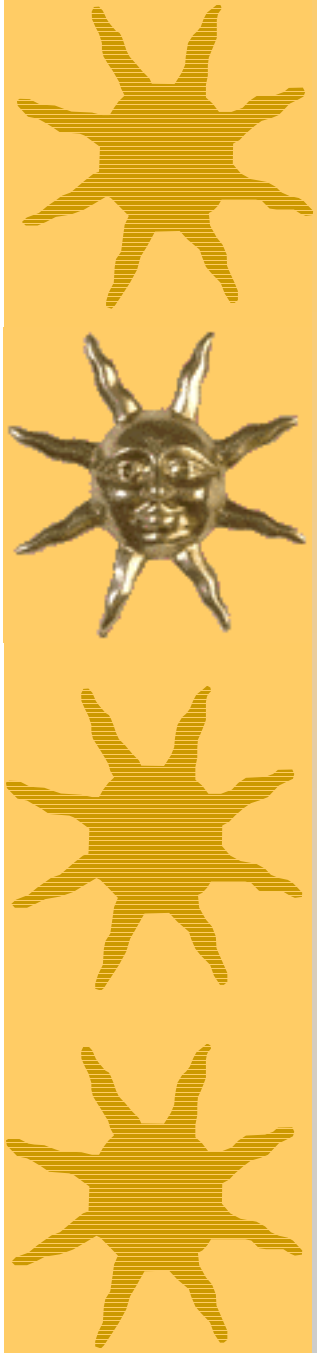
Update on CAAAC Workgroup, EPA Guidance, and Possible Future EPA GHG Regulations



CAAAC Workgroup

What is CAAAC?

- **The Clean Air Act Advisory Committee (CAAAC)** is a senior-level policy committee established in 1990 to advise the U.S. EPA on issues related to implementing the Clean Air Act Amendments of 1990.
- Chartered under the Federal Advisory Committee Act
- Renewed every two years since its creation.
- The membership is approximately 40 members and experts representing state and local government, environmental and public interest groups, academic institutions, unions, trade associations, utilities, industry, and other experts.

Climate Change Work Group

- In October 2009, a workgroup was formed to discuss and identify the major issues and potential barriers to implementing the Prevention of Significant Deterioration program under the Clean Air Act for greenhouse gases.
- The workgroup was to focus mainly on the Best Available Control Technology (BACT) requirement and identify and recommend information and guidance that would be useful for EPA to provide to permitting agencies regarding the consideration of the energy, economic, and environmental impacts of potential control options for greenhouse gases in the context of a BACT analysis.

CAAAC Workgroup

- **October 2009**
  - Presentation on BACT Review given to the Workgroup by EPA
  - Climate Change Workgroup Chairs Presentation
- **February 2010**
  - Interim Phase I Report - Feb 3, 2010
  - Climate Change Work Group Presentation to CAAAC
  - Group 1 Report – Scope of BACT analysis – Defining the Source
  - Group 2 Report – Criteria for Determining Feasible Control Technology
  - Group 3 Report – Criteria for Eliminating Technologies
  - Group 4 Report – Needs of States and Stakeholders
  - GHG BACT Analysis Case Study – Calpine
- **October 2010**
  - Final Report presented to CAAAC (not posted yet)
- http://www.epa.gov/air/caaac/climatechangewg.html

GHG BACT Workgroup – Phase I

- EPA should address following policy issues:
  - What does it mean for a control option to "redefine the source"
  - How to evaluate energy efficiency in a BACT analysis? Can efficiency gains elsewhere at the source and/or offsite be considered
  - How to promote new and innovative control technologies
  - How to consider CCS within a BACT process
  - How should Clean Fuels be considered in BACT
  - Carbon neutrality of biomass

GHG BACT Workgroup – Phase II

- Work Group focused attention on how Energy Efficient Processes and Technologies (EEPT) may be incorporated into the BACT process and on changes that can be made to existing policies to better promote promising new technologies offering reductions in GHGs.

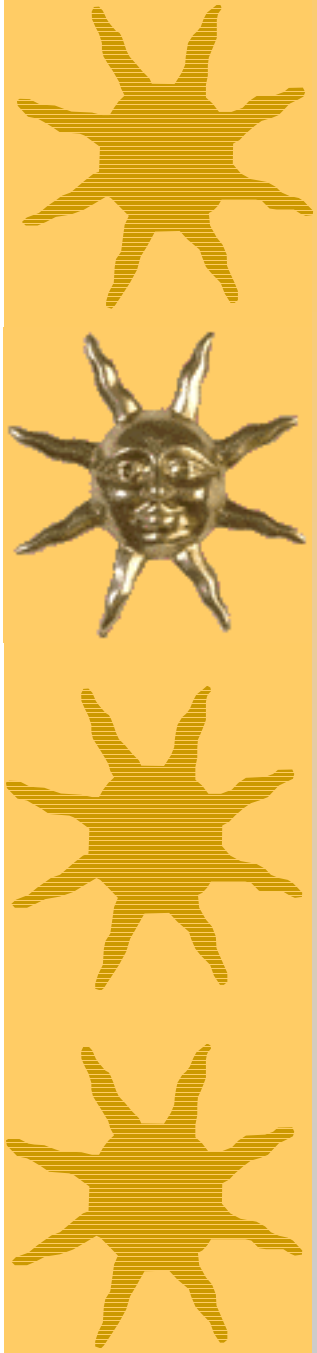
GHG Control Measures White Papers

- Summarizes technical information on sector-specific control options
  - EGU
  - Cement
  - Refineries
  - Iron and Steel
  - Pulp and Paper
  - Industrial Boilers
  - Nitric Acid Plants

EPA Guidance

EPA Guidance

- In general, EPA provides policy and technical guidance to States on how to implement the NSR requirements
- EPA guidance was supposed to be the culmination of CAAAC process – however CAAAC couldn't reach consensus
- Guidance is now being reviewed by OMB (since 9/17/10)
- EPA may provide an opportunity to comment only on technical errors
- Unclear on the level of detail or prescriptiveness of guidance



Possible Future EPA Regulations

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- New Source Performance Standards
  - Possible GHG NSPS proposal for electric power generators (Spring 2011??)
  - Letter from NGOs requesting action (August 20, 2010)
  - GHG NSPS for other source categories likely to follow

Possible Future EPA Regulations

- GHG standards on other vehicle types
  - Medium and Heavy Duty Vehicles (10/25/10)
  - Planes, Trains, Boats????
- Lowering of permitting thresholds are very likely
- EPA GHG Cap & Trade program likely if no movement in Congress
- NAAQS for GHGs (a petition requesting this has already been filed) is possible